DOCUMENT RESUME

ED 037 217 JC 700 083

AUTHOR	Dennison, John D.; Jones, Gordon
TITLE	A Long Range Study of the Subsequent Performance and Degree Attainment of Students Who Transferred from Vancouver City College to the University of British Columbia from 1966-1969.
INSTITUTION	Vancouver City Coll. (British Columbia).
PUB DATE	Jan 70
NOTE	49p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$2.55
DESCRIPTORS	*Academic Performance, *Degree Requirements, *Junior Colleges, *Student Characteristics, *Transfer Students, Withdrawal
IDENTIFIERS	*British Columbia

ABSTRACT

Vancouver City College conducted a 3-year study on two groups of students who transferred from that institution to the University of British Columbia. The first group transferred after completing one year of college and the second group after two years. The academic performance and degree attainment of the two transfer groups were compared, and it was found that attrition and graduation rates of the students varied according to the university program they entered. In general, students who had completed two years at Vancouver City College (especially those who were 25 years and older) were more likely to graduate as scheduled than were students who had completed only one year before transferring. One-year transfers, however, performed better academically than did 2-year transfers. Whether students were full- or part-time had little consequence as far as completion of the university program was concerned. (RC)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED037217

A long range study of the subsequent performance and degree attainment of students who transferred from Vancouver City College to The University of British Columbia from 1966-1969

by
John D. Dennison
and
Gordon Jones

UNIVERSITY OF CALIF.
LOS ANGELES

MAR 23 1970

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

JC 700 085

Published by
The Division of Research and Institutional Development
Vancouver City College
January, 1970

ED037217

A LONG RANGE STUDY OF THE SUBSEQUENT PERFORMANCE AND DEGREE ATTAINMENT OF STUDENTS WHO TRANSFERRED FROM VANCOUVER CITY COLLEGE TO THE UNIVERSITY OF BRITISH COLUMBIA FROM 1966 - 1969.

by

John D. Dennison,
Faculty of Education,
The University of British Columbia

and

Gordon Jones,
Faculty,
Vancouver City College

Vancouver City College
Vancouver, Canada,
January, 1970

CONTENTS

		Page
Chapter I	Background of the Study	1
Chapter II	Subsequent Achievement After Transfer	7
Chapter III	Change in Status	14
Chapter IV	Degree Attainment	23
Chapter V	Comparative Characteristics	31
Chapter VI	Summary	39
Chapter VII	Conclusions and Recommendations	42

CHAPTER I

BACKGROUND OF THE STUDY

Introduction

Late in 1967 a descriptive study of transfer students entering the University of British Columbia from B.C.'s first community college was undertaken on 176 students who entered U.B.C. in September, 1966. This study was followed a year later by an analysis and evaluation of a second group of community college students who entered U.B.C. in September, 1967. Both studies have generally indicated that college transfer students with at least a cumulative college grade point average of C (2.0) on transfer would probably succeed at university.

It became quite clear in the aforementioned studies that the community college was of particular value to certain particular groups of students, namely, those students who had for some time been away from formal education, those whose secondary school achievement was marginal, those who wished to re-evaluate their academic possibilities without facing the initial impact of a four year institution, those mature students for whom the whole range of higher education appears as a formidable obstacle, and those foreign students who may not be able to directly qualify for admission to a university. At the same time it became evident that no single conclusion could be drawn about the performance of transfer students due to probable differences among faculties entered. Undoubtedly, the probability of success subsequent to the community college depended as much on the university program selected as on the ability demonstrated while at college. Although the transfer students, generally speaking, compared

favourably with the regular university student, it was observed that the attrition rate at university of college transfers seemed somewhat higher.

The two studies followed Vancouver City College students into the University of British Columbia. Since that time, several other reviews of college students have been conducted, namely, on students from Selkirk College transferring to U.B.C. and S.F.U., and V.C.C. students transferring to S.F.U. In all of these studies the major objectives have been the same, that is, to obtain normative information about the characteristics of the community college students who transferred to a university; about their performance after transfer; and wherever possible about the relationship of their performance at high school, college and university, as well as comparisons with the performance of regular students who have taken all their work at university.

Design of the Study

The approach used in the original studies, of necessity, was normative and descriptive. Prior to these studies there were no data concerning the characteristics and performance of B.C. community college students transferring to B.C. universities. The approach in this present study, partly determined by the outcomes in the previous reports, was twofold: an analysis of the subsequent achievement of college transfer students two and three years after transfer; and an accounting of the success of the transfer students in terms of degree attainments.

The term junior will be used to identify those students who entered U.B.C. in September, 1966. These transfer students entered the university and enrolled at a second year standing in a particular faculty.

In other words, only one year of equivalent university credit was obtained prior to university entry. The junior transfer student would normally be expected to complete his baccalaureate degree in three years after transfer.

The term senior will be used to identify those students who entered U.B.C. in September, 1967. These students entered the university and enrolled at the third year level. The senior transfer student could normally be expected to complete his baccalaureate degree in two years after transfer.

The above two terms have, depending on the institutions concerned, different interpretations. In this report, however, junior implies a first year university equivalent earned prior to transfer to university (essentially one year at a community college), and senior implies two years of university equivalency earned prior to transfer (essentially two years at a community college).

The analysis of obtained data was designed to provide answers to the following questions:

1. What changes have taken place in the academic status of transfer students after transfer to the university over a two year period for the 1967 transfers, and over a three year period for the 1966 transfers?
2. What percentage of the 1966 transfer group achieved their baccalaureate degree at the end of their third year after transfer from college?
3. What percentage of the 1967 transfer group achieved their baccalaureate degree at the end of their second year after transfer?

4. How many students were enrolled at the time of this study who might still be expected to complete their degree program?
5. Did the success of V.C.C. transfer students to U.B.C. vary with the amount of work completed at the community college before transfer? In other words, were students who transferred to a third year level university program more successful in attaining their degree objectives than students who transferred to a second year level university program?
6. How many students failed to graduate on time because of poor grades? How many lacked enough credit to graduate on time, as a result of a reduced course load or failure in particular courses?

This report then is essentially concerned with the subsequent achievement after transfer of a 145 member group of 1966 V.C.C. transfer students entering U.B.C. and a 376 member group of 1967 transfer students. For the second aspect of the report, dealing with the success of transfer students in terms of degree attainment, only those students who upon enrollment at U.B.C. entered at a university level where they would normally be expected to graduate with a baccularеate degree in the spring of 1969 were considered. This would therefore include 1966 transfer students entering a second year level program, for example, Arts II, and 1967 transfer students entering at a third year level, for example, Arts III.

Objectives of the Study

The authors in this report will show:

1. that university achievement improved for over half of the transfer students during the second year of transfer over the first year of transfer.
2. that the percentage of senior transfer students who improved their grades during the second year of transfer was less than for junior transfer students.
3. that just over three times the rate of senior transfer students withdrew during the university term as did junior transfer students.
4. that the rate of "on-time" graduation was limited to one-fifth of those transfer students who would normally be expected to graduate in April of 1969.
5. that the rate of "on-time" graduation for senior students was four times that of junior transfer students.
6. that twice the percentage of senior transfer students as compared to junior transfer students did not graduate on time due to a partial program status at university.
7. that the rate of failure for a complete term was three times as great for the junior transfer student as for the senior.
8. that although a greater percentage of seniors graduated on time, their overall college achievement was slightly lower than for the juniors.

9. that study at college whether as part-time or full-time had little bearing on future university graduation patterns.

10. that mature students not only had a higher persistence rate and "on-time" graduation rate than college age students, but the rate was considerably higher for students entering university after the first two years equivalent at college than for one year equivalent.

11. that the chances of university graduation on time are far more probable for junior transfer students with a cumulative college G.P.A. of C+ or better (2.5).

12. that in the case of senior transfer students the probability of "on-time" graduation is fairly high for those with a cumulative college G.P.A. of C (2.0).

13. that the persistence rate for males was greater than for females after transfer to university.

CHAPTER II

SUBSEQUENT ACHIEVEMENT AFTER TRANSFER

The major incentive for this study of V.C.C. transfer students was provided by the finding that fewer than one-eighth of the students entering U.B.C. as a junior transfer student and entering the university at a second year level had received their baccalaureate degree after three years as normally would be expected, and less than one-half of those students transferring as a senior student to U.B.C. had received the degree after two years at university. The findings from previous studies have indicated that college transfer students have met with general success in their first year after transfer. However, the rather low percentage of transfer students achieving their baccalaureate requirements on time may tend to cast some doubt on the success of the community college in the performance of the transfer function, or the effectiveness of articulation between the college and the university. The numbers of students upon which this opinion is based is, however, rather small. The outcome of the rather considerable group of students still enrolling at the university will be of importance in reaching a conclusive decision about this aspect of the transfer function.

This present study will include an analysis of the 145 transfer students from V.C.C. to seven selected U.B.C. faculties as reported in the study of students who entered U.B.C. in September, 1966, and of 376 students who transferred from V.C.C. to U.B.C. in September, 1967.

Status after Transfer - Juniors

Results of the follow-up of the junior transfer students (i.e. transferring after one year equivalent at college) are summarized in Table 1. The percentage of graduates was limited to ten. However, it should be pointed out that not all of the 145 students would normally be eligible for a baccalaureate degree since certain students enrolled at a first year university level and would not be eligible for the degree until April, 1970. A more accurate evaluation of the degree granting function will be presented in a later chapter. Just over one-half of the students were still enrolled as of April, 1969, and had not graduated. Nearly two-fifths of the group under study had withdrawn prior to the date of this study and had not re-enrolled.

The highest percentage of persistors was found for those students who entered first year Applied Science. All seven of these students have remained enrolled to date. It should be noted that the average college cumulative G.P.A. of these students was 2.79 which was higher than for any of the other faculties. Also worthy of note is the fact that this faculty was the only one of those studied where all the transferring college students had a cumulative G.P.A. of over 2.0 and where all the students while at V.C.C. studied with a full-time course load.

Three of the original faculties to be studied, Commerce I, Applied Science I and Education II (secondary) were composed of all male transfer students. It was these faculties that during the three year university period have experienced the highest overall persistence rate, 63 per cent, 100 per cent and 75 per cent respectively. The faculty

TABLE I

Academic status of Vancouver City College students three years after transfer to U.B.C., by original university faculty entered in 1966

		Arts II		Commerce I		App'd Sc I		Science II		Education (Transfer) II		Education (Second) I		Education (Second) II		TOTAL	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Status	Sex																
Graduated	Male	4	12	-	-	-	-	4	17	1	20	-	-	-	-	9	9
	Female	4	24	-	-	-	-	-	-	1	3	-	-	-	-	5	10
	Total	8	16	-	-	-	-	4	16	2	6	-	-	-	-	14	10
Still enrolled	Male	20	63	12	63	7	100	9	39	3	60	1	100	6	75	58	61
	Female	5	29	-	-	-	-	1	50	10	33	-	-	-	-	16	32
	Total	25	51	12	63	7	100	10	40	13	37	1	50	6	75	74	51
Withdraw	Male	8	25	7	37	-	-	10	44	1	20	-	-	2	25	28	30
	Female	8	47	-	-	-	-	1	50	19	64	1	100	-	-	29	58
	Total	16	33	7	37	-	-	11	44	20	57	1	50	2	25	57	39

with the lowest percentage of persistors at university after three years was Education, transfer program.

Although the Education faculty, transfer program, did experience a 6 per cent graduation rate, well over half (57 per cent) were found to be non-persistors. Since these students are permitted to commence teaching without a degree after their first or second year in the Education faculty, it may be assumed that some of these students at least may return to study and complete degree requirements as either an extra-sessional student or a summer session student.

Status after Transfer - Seniors

Results of the follow-up study of those students transferring from college at the senior level are summarized in Table 2. Just under three quarters (73 per cent) of the senior transfer students studied in this follow-up have remained enrolled for the full two year period since transfer.

The highest percentage of persistors after the two years of study at U.B.C. was found in the Applied Science faculty where ninety-one per cent of the 21 students who enrolled in September, 1967, were still enrolled. Once again the students entering this faculty obtained while at V.C.C. the highest cumulative mean G.P.A. of all students entering at a first or second year level to U.B.C. The mean G.P.A. was 2.62. Although the U.B.C. faculties experiencing transfer students with a relatively high G.P.A. from V.C.C. seemed to have a higher persistence rate after three years at U.B.C., that is, those students classed as junior at time of transfer, this at present does not seem to be the case

TABLE 2a

Academic status of Vancouver City College students two years after transfer to U.B.C., by original university faculty entered in 1967

Status	Sex	Arts I N	Arts I %	Arts II N	Arts II %	Arts III N	Arts III %	Commerce I N	Commerce I %	App'd Sc I N	App'd Sc I %	Science II N	Science II %	Education (Transfer) II N	Education (Transfer) II %
Grad-uated	Male	-	-	7	[illegible]	7	44	-	-	-	-	-	-	-	-
	Female	-	-	1	4	2	50	-	-	-	-	-	-	-	-
	Total	-	-	8	6	9	45	-	-	-	-	-	-	-	-
Still Enroll-ed	Male	5	45	58	78	7	44	25	83	18	90	33	85	8	67
	Female	3	60	17	74	-	-	3	100	4	100	5	83	15	47
	Total	8	50	75	77	7	35	28	85	22	93	38	84	23	52
With-draw	Male	6	55	9	12	2	12	5	17	2	10	6	15	4	33
	Female	2	40	5	22	2	50	-	-	-	-	1	17	17	53
	Total	8	50	14	15	4	20	5	15	2	9	7	16	21	48

TABLE 2b

		Education (Elem) I		Education (Elem) II		Education (Secondary) II		Other[a]		TOTAL	
		N	%	N	%	N	%	N	%	N	%
Status	Sex										
Grad-uated	Male	-	-	-	-	-	-	2	7	16	6
	Female	-	-	-	-	-	-	-	-	3	3
	Total	-	-	-	-	-	-	2	5	19	5
Still Enroll-ed	Male	-	-	1	100	14	74	17	61	186	75
	Female	10	83	16	84	6	100	8	80	84	70
	Total	10	83	17	85	20	80	25	66	270	73
With-draw	Male	-	-	-	-	5	26	9	32	48	19
	Female	2	17	3	16	-	-	2	20	33	27
	Total	2	17	3	15	5	20	11	29	81	22

[a] Includes faculties with less than 10 V.C.C. transfer students in each.

for the students who transferred as seniors. For example, students entering first year Commerce had a V.C.C. G.P.A. of 2.26 and those entering second year elementary Education (A2 program) a V.C.C. G.P.A. of 2.18, the lowest cumulative averages experienced by the 1967 transfer group, yet the persistence rate for both faculties at the end of the second year at U.B.C. was 85 per cent. There is a possibility that a higher college G.P.A. may lead to a higher persistence rate after three years at university. However, at the present time it would appear that the college G.P.A. is not a reliable predictor of persistence or non-persistence, at least to the second year after transfer.

Sex Differences

When sex of transfer students was considered the rate of non-persistence of females was higher than for males both for the senior and junior transfer group under study. At the end of three years at university the withdrawal rate for females was 58 per cent as compared to 30 per cent for males and for the two year transfer group the rate was 27 per cent for females and 19 per cent for males.

It is noted that there is a tendency for females to have a higher rate of non-persistence than males for all faculties entered, except one, whether after two years of transfer or three years of transfer.

CHAPTER III

CHANGE IN STATUS

Junior Transfer Students (1966)

While the overall findings for the junior and senior transfer students has provided grounds for drawing conclusions about the transfer function, an analysis of the data obtained is expected to provide some insight into the various patterns which students apparently follow in obtaining their baccalaureate degree.

Particular attention was paid to the group of students who enrolled at university in September, 1966. Six U.B.C. faculties where more than five V.C.C. students had transferred were considered for this follow-up. The findings for the 1966 transfer group are that 37 per cent of the students who finished their first year in attendance at U.B.C. did not complete their second year. This attrition rate was considered somewhat high with the largest percentage of dropouts between the first and second year of attendance experienced by Education students (57 per cent). Although the exact reason for this attrition is not known, it is clear from a previous study on this group that about 55 per cent had passing or better grades. It is assumed that a good portion of these students accepted a teaching position in the public school system. The attrition rate experienced by the other faculties under study after the first years of attendance at U.B.C. was Science II, 36 per cent; Arts II, 28 per cent; Commerce I, 26 per cent; and Applied Science I, nil.

The overall attrition rate between the second and third year at university was reduced to one-half of the rate between first and

second year. Only 17 per cent of those transfer students in the six selected faculties withdrew from or failed to enroll in the third year after transfer. Although reductions in attrition were evident for the individual faculties, the Education faculty continued to lead the way with 42 per cent of those students either withdrawing or not re-enrolling after their second year at U.B.C. Once again the reader is reminded that these students would be eligible for a teaching position without completing degree requirements.

Too often in studies of a follow-up nature over a limited period of time an assumption is made that students who have withdrawn, especially if the withdrawal is a "voluntary" one, will return at a later date to continue their studies. In this study no attempt was made to trace students who withdrew other than to note those who re-enrolled one year later. Of the 54 students who dropped out for the 1967 - 1968 academic year, only 15 (28 per cent) returned to study at U.B.C. during the 1968 - 1969 academic year. Six of these fifteen students, all in the Education faculty, returned as extra-sessional students.

The relative change in achievement status of the 85 transfer students completing the second year of transfer in the spring of 1968 is outlined in Table 3. The ratio of students who increased their average achievement during their second year of transfer was 62 per cent. In other words nearly two-thirds of the transfer students did better two years after transfer than in their first year. Some 30 per cent dropped their average in the second year. Although there seemed to be no pattern as far as the specific faculties entered are concerned, the nine

TABLE 3

Relative placement of Vancouver City College students who transferred to U.B.C., September 1966, at the end of the second year in attendance and at the end of the third year in attendance at U.B.C. according to percentage average obtained at university.

Faculty entered in first year of transfer	Second year of transfer; per cent average obtained compared with 1st year:			Third year of transfer; per cent average obtained compared with 2nd year:							
				Raised		Same		Lower		W.D. or not re-enrolled	
		N	%	N	%	N	%	N	%	N	%
Arts II	Raised	25	78	10	31	1	3	12	38	2	6
	Same	-	-	-	-	-	-	-	-	-	-
	Lower	7	22	5	16	-	-	-	-	2	6
Commerce I	Raised	2	22	1	11	-	-	1	11	-	-
	Same	2	22	-	-	1	11	1	11	-	-
	Lower	5	56	2	22	-	-	2	22	1	11
Applied Science I	Raised	2	33	1	17	-	-	1	17	-	-
	Same	-	-	-	-	-	-	-	-	-	-
	Lower	4	67	4	67	-	-	-	-	-	-
Science II	Raised	9	56	4	25	-	-	4	25	1	6
	Same	2	13	1	6	-	-	-	-	1	6
	Lower	5	31	2	13	-	-	3	19	-	-
Education (transfer) II	Raised	10	59	3	17	-	-	5	29	2	12
	Same	3	18	1	6	-	-	-	-	2	12
	Lower	4	23	-	-	-	-	1	6	2	18
Education (Secondary) II	Raised	5	100	3	60	-	-	2	40	-	-
	Same	-	-	-	-	-	-	-	-	-	-
	Lower	-	-	-	-	-	-	-	-	5	6
TOTAL	Raised	53	62	22	26	1	1	25	30	5	6
	Same	7	8	2	2	1	1	1	1	3	4
	Lower	25	30	13	15	-	-	6	7	6	7

Commerce students continuing at U.B.C. for a second year appeared to have the lowest percentage of raised year end averages. In this particular case only 22 per cent of these students improved their grades two years after transfer as compared to the first year of transfer. The six students entering the Faculty of Applied Science also experienced difficulty in the improvement of overall year end achievement with only one third advancing in grades for their second year of transfer.

Although all five Education students on the secondary program showed improvement, only 59 per cent of Education students on the education transfer program showed any improvement. The most significant improvement was demonstrated by the 32 students who originally transferred to the second year level of the Arts faculty. Just over three-quarters of these students raised their grades in the second year of transfer.

The trend of continual improvement of grades starting with the second year of transfer as experienced in certain American follow-up studies was not confirmed in this present study. The largest continual increase of grades at university obtained by transfer students from V.C.C. was found in the Arts faculty. The ratio of students, however, obtaining this increase was considerably reduced. Where 78 per cent of the Arts students raised their grades in the 1967 - 1968 academic year as compared with their first year of transfer, only 31 per cent continued this trend for the 1968 - 1969 year. While this group enjoyed the largest ratio of improved grades, it also recorded the largest percentage of lowered grades in the third year of transfer with 38 per cent of the students achieving at a lower standard. At the same time, of the 22 per cent of

Arts students who had lower grades in their second year of transfer, 16 per cent did raise these grades during the third year. As may be observed from Table 3, there is no consistent pattern of grade changes observable for the faculties under consideration. When all faculties are grouped together, nearly two-thirds of the students had improved grades two years after transfer, but any continued improvement was limited to only one-quarter of the students in the third year after transfer.

Senior Transfer Students (1967)

Although the overall findings for the students entering university at a junior transfer level have provided grounds for drawing conclusions about the transfer function, an analysis of the data obtained in the study of the senior transfer student is expected to also provide some insight into the various patterns of achievement followed by transfer students in obtaining their degrees.

A total of 55 per cent of the 1967 transfer students improved their percentage average at the end of the second year of transfer over the first year of transfer. The attrition rate at the end of the second year amounted to nearly one-quarter while approximately one-fifth of the students dropped in their achievement when compared with the first year at university. The results are summarized in Table 4.

A more interesting comparison of first and second year university achievement is illustrated in Figure 1. The same selected faculties as were used in the original study of 1966 transfer students is used for comparisons. The 1966 transfer group was the first such group of

TABLE 4

Relative placement of Vancouver City College students who transferred to the University of British Columbia, September 1967, at the end of their second year in attendance at the university according to percentage average obtained.

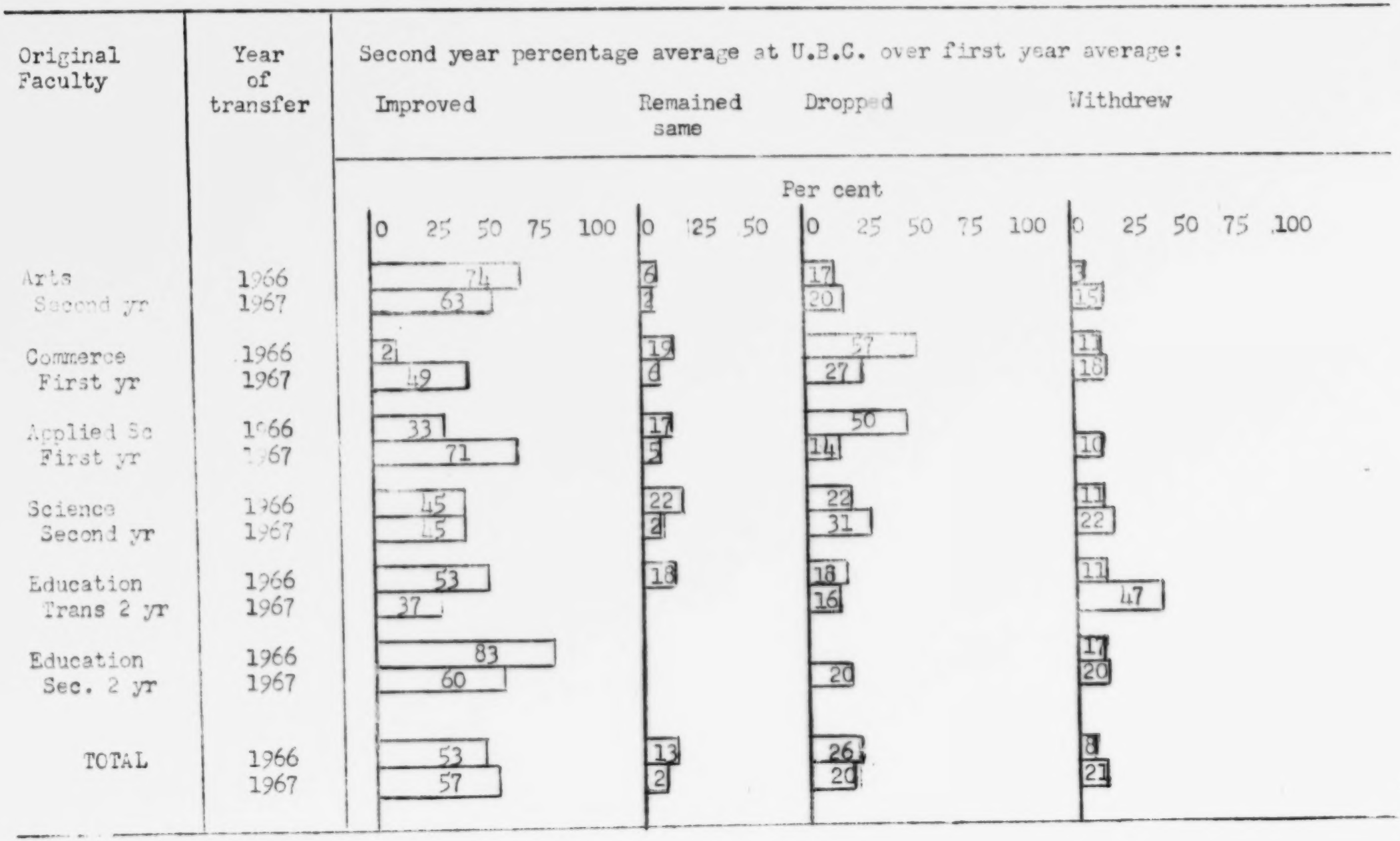
Faculty entered in 1967	Year	Number and percentage of V.C.C. transfer students whose university percentage average for their second year in attendance when compared with their first year in attendance at U.B.C.:							
		Improved		Remained the same		Dropped		Withdrew	
		N	%	N	%	N	%	N	%
Arts	1	7	44	-	-	1	6	8	50
	2	61	63	2	2	19	20	15	15
	3	11	55	1	5	4	20	4	20
Commerce	1	16	49	2	6	9	27	6	18
	2	2	100	-	-	-	-	-	-
Agriculture	2	-	-	-	-	-	-	2	100
Home Ec.	2	2	67	-	-	1	33	-	-
Physical Ed.	1	1	50	-	-	-	-	1	50
	2	1	33	-	-	2	67	-	-
Music	2	1	50	-	-	-	-	1	50
Applied Sc.	1	15	71	1	5	3	14	2	10
Science	1	1	20	-	-	2	40	2	40
	2	20	45	1	2	14	31	10	22
	3	1	33	-	-	-	-	2	67
Pharmacy	1	1	50	-	-	1	50	-	-
Forestry	1	2	50	1	25	-	-	1	25
Education (El)	2	1	100	-	-	-	-	-	-
Education (Transfer)	2	16	37	-	-	7	16	21	47
	3	1	25	-	-	-	-	3	75
Education (Elementary)	1	10	83	-	-	-	-	2	17
	2	16	80	1	5	1	5	2	10
Educ. Indust.	2	1	50	-	-	-	-	1	50
Education (Secondary)	2	15	60	-	-	5	20	5	20
	3	1	100	-	-	-	-	-	-
	4	-	-	-	-	1	100	-	-
TOTAL		203	55	9	2	70	19	88	24

V.C.C. transfer students to enter U.B.C. It might be assumed that as the community college gained in experience, the transfer students would experience greater success after transfer and that the achievement at university would continue to improve. If this was to be the case, then the 1967 transfer group should be expected to do better at university than did the 1966 transfer students. In an evaluation of second year achievement as compared to first year, the percentage of improved grades was slightly higher for the 1967 entrants as compared with the 1966 entrants, that is, 57 per cent to 53 per cent. Of the 1967 transfer students in the six selected faculties 83 per cent entered U.B.C. with a cumulative college G.P.A. of 2.0 or better. In 1966 the percentage of students transferring to the same faculties with a college G.P.A. of 2.0 or better was 76. In other words, for the 1967 transfer students, a larger proportion of students entered university with a C or better average and a larger ratio of this group improved their university achievement after two years of transfer. There is, however, wide variation in the percentages of improved grades, lowered grades and withdrawals when the six faculties are considered. There would, therefore, appear to be little predictive value in college G.P.A.'s at the present time in forecasting the trend of university achievement over a two year university time period.

This point was also confirmed through an analysis of the mean cumulative G.P.A.'s for the senior transfer students in the six faculties. The mean G.P.A.'s are indicated in Figure 2. For example, in the Arts faculty, second year, at the time of transfer the 1967 entrants had a college G.P.A. of 2.5 as compared with 2.3 for the 1966 group, yet the 1967 transfers

FIGURE 1

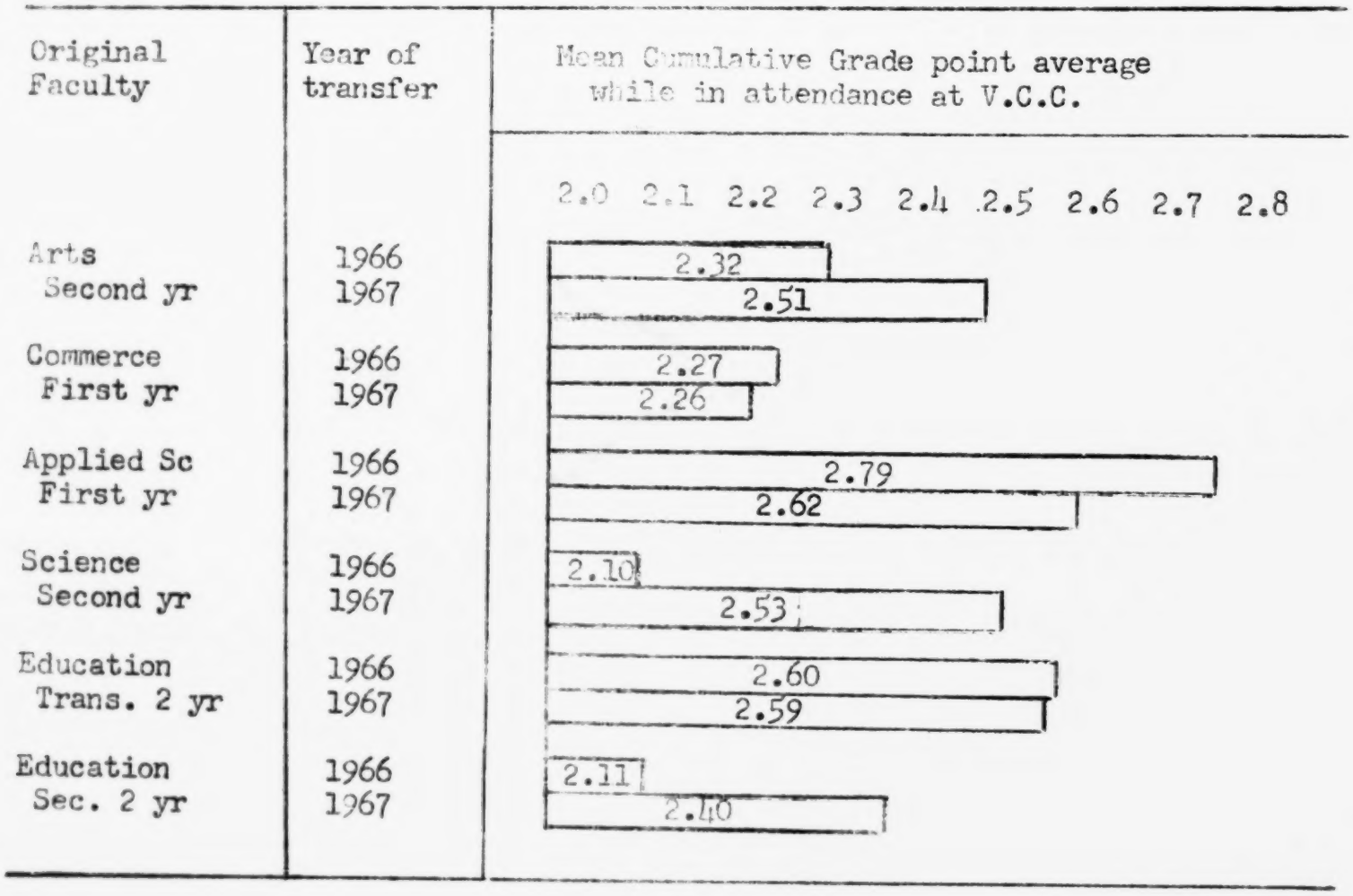
Percentages of Vancouver City College transfer students whose percentage average at the completion of the second year in attendance at the University of British Columbia as compared with the first year in attendance for six selected faculties, improved, remained the same, dropped, or the student withdrew.



had a lower percentage of improved grades after their second year of transfer than did the 1966 group. This lack of relationship was found for each faculty studied.

FIGURE 2

Mean cumulative grade point average, while in attendance at Vancouver City College, of transfer students to the University of British Columbia in six selected faculties.



CHAPTER IV

DEGREE ATTAINMENT

Analysis of performance in the previous studies were concerned primarily with relationships between the characteristics of the students and their achievement in the university. This has been the first opportunity to evaluate the function of the community college as a preparatory institution for the degree granting function of a university.

In September, 1966, 117 transfer students entered U.B.C. at a second year university level (junior transfer students) in faculties where they would be expected to graduate with a baccalaureate degree three years later. Only 12 per cent of these students did so. Of the students transferring from V.C.C. to U.B.C. in September, 1967, (the senior transfer student) 40 transferred to a third year university level in a faculty where a degree would normally be expected two years after transfer, that is in the spring of 1969. Nineteen of these students (47 per cent) graduated on time. From the limited numbers of students involved, it is quite clear that the percentage of students graduating on time is considerably higher for students who transfer to the third year level at U.B.C. than the second year level. In other words nearly four times the percentage of students transferring from college after two years of equivalent university study graduated on time as did students transferring after just one year equivalent university study at the college. The overall transfer result has been that only 21 per cent of those students who should normally have received their baccalaureate degree have done so on time. Nearly four-fifths of the students (124 in number) have not graduated from U.B.C. on time. These findings are indicated in Table 5.

TABLE 5

Enrollment Status of Vancouver City College transfer students to the University of British Columbia who would normally graduate from U.B.C. in April 1969.

	Enrolled, 1966 at a 2nd year level (Junior)		Enrolled, 1967 at a 3rd year level (Senior)		Total	
	N	%	N	%	N	%
Graduated on time	14	12	19	47	33	21
Have not Graduated	103	88	21	53	124	79
TOTAL	117	100	40	100	157	100

Delayed in Graduation

Reasons for failure to graduate within two years after transfer upon entering U.B.C. at a third year level, or within three years after transfer upon entry at a second year level were considered to be of particular importance in performance analysis because of the economic implications not only to students and their families but also to the taxpayer who contributes much to the support of the community college. The college and university transcripts of the 124 students not graduating on time at U.B.C. were examined in an attempt to identify the major reasons for their failure to do so.

The records of the 103 students who enrolled at U.B.C. in 1966 and did not graduate in April of 1969 were examined first; this was followed

by an examination of the university transcripts of those 21 V.C.C. students who enrolled at U.B.C. in 1967 and had not graduated by 1969 as expected. The major reasons for not graduating on schedule are listed in Table 6. In some cases there was more than one reason for a student not graduating on time. However, for purposes of this report, in multi-reason cases, only the single most important reason for not graduating on time was listed. For example, if a student experienced one or more supplementals as well as changing his program, then the change of program would obviously be the single most important reason for not graduating on schedule.

Withdrawal

Withdrawal from university accounted for the largest proportion of non-graduating students. Slightly over one-third (36 per cent) of the students were in this category. Withdrawal students have been considered as not graduating on schedule rather than just as "drop outs". There is an assumption that some of these withdrawals will eventually come back to their studies, either as full-time students, extra-sessional students or summer session students. It is still too early in the series of studies conducted by the authors to determine if this assumption is valid.

The pattern of withdrawals was of some interest. Although a fair number of the "withdrawals" occurred in the Education faculties, it should be made quite clear that the Education students are not required to complete their baccalaureate degree prior to accepting a teaching position. For a number of these students "withdrawal" is apparently only temporary for there is already evidence that a portion of these students are returning to complete degree requirements either at summer session or extra-sessional classes. A large number of these Education students had no intention of completing their degree by winter session at the time at which they

TABLE 6

Vancouver City College transfer students not graduating on schedule according to original faculty entered and reason for nongraduation to date.

Reason	Enrolled, 1966 at a second year level (Juniors)								Enrolled, 1967 at a third year level (Seniors)								Both levels	
	Arts		Sc		Educ		Total		Arts		Sc		Educ		Total		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Changed program	7	17	1	5	-	-	8	8	-	-	-	-	-	-	-	-	8	6
Failed one year	8	19	6	28	2	5	16	16	1	7	-	-	-	-	1	5	17	14
Withdrew during session	2	5	1	5	4	10	7	7	3	20	1	50	1	25	5	24	12	10
Withdrew by not re-enrolling	10	24	4	19	15	36	29	27	-	-	-	-	1	25	1	5	30	24
Withdrew by non-payment of fees	2	5	1	5	-	-	3	3	-	-	-	-	-	-	-	-	3	2
Interrupted study (not continuous)	4	10	-	-	2	5	6	6	-	-	-	-	-	-	-	-	6	5
Partial program	5	12	7	33	6	15	18	17	6	40	1	50	1	25	8	38	26	21
Supplementals req'd	2	5	1	5	3	7	6	6	4	26	-	-	1	25	5	24	11	9
Extra sessional student	-	-	-	-	7	17	7	7	-	-	-	-	-	-	-	-	7	6
Reason unknown	1	3	-	-	2	5	3	3	1	7	-	-	-	-	1	5	4	3
TOTAL	41		21		41		103		15		2		4		21		124	

enrolled in the Faculty. By far the greatest percentage of withdrawals due to non re-enrollment were experienced by those students who left college for university after only one year at college, that is by those students entering U.B.C. at a second year level. Just over one-quarter of the one year transfers (27 per cent) fell in this category while for the two year transfers, that is, those students who remained at V.C.C. for their first two years of university equivalent only, one-twentieth (5 per cent) withdrew in this manner. It, therefore, appears that the chances of a one year transfer student not graduating on time due to not re-enrolling is five to one when compared with the two year college transfer student.

There is, however, evidence that the two year college transfer student will find university study more difficult during the university year than will the student entering university after one year at college. Twenty-four per cent of the senior college transfer students withdrew during the university session as compared with only 7 per cent of the junior college transfer students.

Partial Program

Slightly over one fifth (21 per cent) of the students did not graduate on schedule due to a study program, for at least one year at university, which was considered as a partial program. This trend was found to be most prevalent for the senior transfer group where 38 per cent of those not graduating were found to have taken less than a full year's course load. This was just over twice the percentage of junior transfers not graduating due to a partial program (17 per cent). Further studies

will be required to determine how many of these students will complete degree requirements and how long it will take. Most of the group on the partial program had simply earned less than the minimum total amount of credit required for a degree in the various major fields, largely as a result of having taken a relatively light course load during one or more university terms. In other words, the typical transfer student who failed to graduate on time due to a partial program had been in continuous attendance, with satisfactory university grades, but with too few credits per term to be able to accrue in the three years after transfer (if he left V.C.C. after one year) or in the two years after transfer (if he left V.C.C. after two years) the minimum number of credits required for graduation. Although there were some significant differences in the percentages of students on a partial program when the individual faculties were concerned, it was felt that the numbers involved were too small to make any meaningful comparison.

Unsatisfatory Grades

A student who failed an individual subject could receive a partial program status at the end of the university year. The major portion of students, however, experiencing failing grades did so in such a manner that they failed the year. In other words their overall achievement percentage was low enough to justify no credit for the year. Fourteen per cent of those students who should have graduated in 1969 and did not do so, were found to have failed one university year. These students, however, are still enrolled. Some are on the same program, others have changed programs. Even though a student changed his program after failing the year, he would still be classed in the failed one year section since this would

be the major reason for not graduating on time. The chances of failing a year seemed to be three times greater for the junior transfer students as for the senior transfer student (16 per cent to 5 per cent).

Supplemental Credit

Students with unsatisfactory grades in certain subjects, yet with sufficient achievement to be granted supplemental privileges accounted for nine per cent of the sample. Supplemental results were not available at the time of this study. However, since no other reason could be uncovered for these students not graduating on time, it could reasonably be assumed that either the supplemental examinations were not written or were written unsatisfactorily.

Curriculum Factors

A further analysis was made of the transcripts of the non-graduates who appeared to have earned both satisfactory university averages and the required amount of credit for graduation. A preliminary examination of the transcripts showed that about six per cent of the non-graduates who appeared to have been eligible to receive their degrees were delayed by a change in major or program after transfer which resulted in the imposition of additional course requirements before graduation could be completed. Since credit would not be deducted when they changed majors or program, the total number of units they were required to earn was increased in relation to the additional course requirements imposed.

Lack of articulation with V.C.C. may have accounted for some small delay in the progress of certain students. Records of actual credit granted to the student on transfer to U.B.C. were not available. However, the analysis of transcripts quite clearly showed the reasons for delayed

transfer as indicated in Table 6. At the same time it should be clear that loss of credit on transfer may have accounted for some of the withdrawal category as well as the partial program category. It is reasonably clear that articulation problems even in one subject could possibly be enough to delay graduation within one of the categories listed. For this reason, further investigation into credit and course loss on transfer from V.C.C. to U.B.C. should be conducted. Further to this, an attempt must be made to identify particular courses and subject fields in which students have either experienced difficulty prior to transfer or after transfer in order to determine the significance on the topic of degree graduation.

CHAPTER V

COMPARATIVE CHARACTERISTICS

The transcript analysis of those junior transfer students and senior transfer students who had graduated on time, and those who did not graduate on time, yielded several additional factors which could account for variances in university graduation.

As has been previously mentioned, the senior college transfer student experienced a far greater percentage of "on time" university graduation than did the junior level transfer student. The various characteristics and achievement of both junior and senior transfer students who acquired their baccalaureate degree on time is given in Table 7. Although it is quite clear that the seniors have a better graduation rate than the juniors, it is also clear that the overall university achievement of the seniors is not quite as high as is the case for the juniors, at least for those graduating on time. The mean U.B.C. percentage average is nearly the same for both groups with the juniors earning an average of 2 points higher than the seniors (71 per cent to 69 per cent). This in itself, however, does not necessarily indicate a better student or a better prepared student from college since the junior has had a longer opportunity to improve his grade during a three year university period as compared with the two year university time period for the senior transfer student. Nevertheless, when the cumulative percentage earned and the final academic status of these students are studied, it is once again clear that the juniors have a greater proportion of the top percentages (75 per cent and over) as well as a greater ratio of first class academic status. The comparison of the mean G.P.A. earned at V.C.C. shows little difference between senior and juniors, the former earning an average college G.P.A. of

TABLE 7

Comparative characteristics and achievement of V.C.C. transfer students entering U.B.C. at a second year level and a third year level, and who have graduated on time.

	Junior Second Year Level (after 3 years of transfer)		Senior Third Year Level (after 2 years of transfer)	
	N	%	N	%
Graduated on time	14	12	19	47
Number subjects taken at V.C.C.				
a. mean	9		15	
b. lowest	5		6	
c. highest	11		22	
Sex				
a. male	9	64	16	84
b. female	5	36	3	16
Age				
a. college age	11	79	9	47
b. mature	3	21	10	53
V.C.C. Cum GPA				
3.0 & over	3	22	4	21
2.5 - 2.9	8	57	8	42
2.0 - 2.4	2	14	6	32
under 2.0	1	7	1	5
Mean V.C.C. GPA	2.6		2.7	
U.B.C. Cum %age				
80 - 84	2	14	-	-
75 - 79	2	14	4	21
70 - 74	4	29	4	21
65 - 69	4	29	7	37
60 - 64	1	7	2	11
56 - 59	1	7	2	11
U.B.C. Status				
a. 1st class	3	22	-	-
b. 2nd class	9	64	16	84
c. pass	2	14	3	16
Mean U.B.C. %age		71		69

2.7 as compared to 2.6 for the juniors. When the cumulative college G.P.A. is considered, the juniors demonstrated a greater proportion of top averages, with the seniors earning a larger proportion of the lower G.P.A.'s.

It would therefore appear that although a greater percentage of seniors have graduated on time (approximately four times that of the juniors) their overall college achievement is slightly lower than for the juniors who graduate on time.

The characteristics and achievement analysis of those students not graduating on time and those students who have withdrawn from U.B.C. and not returned as of April, 1969, are outlined in Table 8 and Table 9. Since the number of senior students involved in both these categories was small, ten and five respectively, any comparisons with the juniors should be taken under advisement.

There were few if any characteristics that could be classed as significant at this time due to the numbers involved. However, some characteristics were evident enough to suggest possible trends. For example, the number of subjects taken while in attendance at V.C.C. seemed to have little bearing for either juniors or seniors on whether they graduated on time or not, or withdrew from university. The mean number of subjects taken by the junior transfer student was the same, that is nine, regardless of success or lack of it with respect to graduation. Although various means were demonstrated by the senior transfer student, the range was no more than three subjects. It could therefore be inferred that study at V.C.C. whether as a part-time student or full-time student has at present little bearing on future university graduation patterns.

TABLE 8

Comparative characteristics and achievement of V.C.C. transfer students entering U.B.C. at a second year level and a third year level and who have not graduated on time but are still enrolled.[a]

	Junior Second Year Level (after 3 years of transfer)		Senior Third Year Level (after 2 years of transfer)	
	N	%	N	%
Enrolled but not graduated	29	25	10	25
Number subjects taken at V.C.C.				
a. mean	9		18	
b. lowest	1		12	
c. highest	14		24	
Sex				
a. male	24	83	10	100
b. female	5	17	-	-
Age				
a. college age	27	93	9	90
b. mature	2	7	1	10
V.C.C. Cum GPA				
3.0 & over	1	3	2	20
2.5 - 2.9	3	11	2	20
2.0 - 2.4	13	45	5	50
under 2.0	12	41	1	10
Mean V.C.C. GPA	2.1		2.4	
U.B.C. Cum %age				
80 - 84			1	10
75 - 79			1	10
70 - 74	2	7	1	10
65 - 69	6	21	2	20
60 - 64	6	21	2	20
50 - 59	13	45	3	30
under 50	2	7		
Mean U.B.C. %age		60		66

[a]Does not include those students enrolled as extra-sessional or summer session students.

TABLE 9

Comparative characteristics and achievement of V.C.C. transfer students entering U.B.C. at a second year level and a third year level who have withdrawn from study and have not re-enrolled as of April, 1969.

	Junior Second Year Level (after 3 years of transfer)		Senior Third Year Level (after 2 years of transfer)	
	N	%	N	%
Withdrawn	40	34	5	13
Number subjects taken at V.C.C.				
a. mean	9		17	
b. lowest	2		13	
c. highest	12		23	
Sex				
a. male	16	40	3	60
b. female	24	60	2	40
Age				
a. college age	33	82	5	100
b. mature	7	18	-	-
V.C.C. Cum GPA				
3.0 & over	10	25	3	60
2.5 - 2.9	7	18	-	-
2.0 - 2.4	15	37	2	40
under 2.0	8	20	-	-
Mean V.C.C. GPA	2.5		2.9	
U.B.C. Cum %age				
80 - 84	2	5	-	-
75 - 79	-	-	-	-
70 - 74	4	10	2	40
65 - 69	3	7	1	20
60 - 64	7	18	-	-
50 - 59	4	10	-	-
under 50	17	43	2	40
Mean U.B.C. %age		50		52

Age

When the age factor was considered, the college age student, that is a student under 25 years of age, was most prevalent in the junior transfer group. Approximately seven times as many college age students as mature students (25 years of age or over) were found in the juniors. Twenty-five per cent of the mature age juniors graduated on time as compared with 15 per cent of the college age juniors. This percentage was considerably increased for the senior transfer student. In this case the percentage of graduates for mature students was 90, while for the college age student the percentage was 39. It is therefore apparent that the mature student not only had a higher persistence rate and on time graduation rate than the college age student but this rate was considerably higher for those students entering university after the first two years equivalent at college than for those taking just one year at college.

Sex

There was little difference noted in the university graduation ratio of male or female students whether at the junior or senior level. Eighteen per cent of the male junior students graduated on time as compared with 15 per cent of the females. In the case of the senior students, 55 per cent of the males graduated on time and 60 per cent of the females. However, in the case of non-persistence, the female non-persistence rate was considerably higher than for males. Seventy per cent of the female juniors withdrew as compared with 32 per cent of the males, and in the case of the seniors 40 per cent of the females withdrew as compared to 10 per cent of the males. In other words, at both levels, females had a lesser tendency to persist in their university study to the time of expected

graduation than did males. At the same time the reader is reminded that a large portion of the female "withdrawals" came from a predominantly female faculty, that is, Education. In this particular case the student is allowed to accept a teaching position before completing degree requirements. The percentages of females listed as "withdrawals", therefore, may be somewhat distorted.

College Grades

As would be expected, the cumulative college G.P.A. varied considerably between the students graduating on time and those who did not. Forty-one per cent of those not graduating on time among the juniors had a college G.P.A. less than C (2.0). At the same time nearly 15 per cent of those not graduating on time had a G.P.A. while at V.C.C. of C+ (2.5) or better. It should be noted that two students, one at the junior level and one at the senior level did graduate from university on time even though their college G.P.A. was less than C.

Of the fourteen students who transferred at a junior level to U.B.C., three students (21 per cent) graduating on time had a G.P.A. of 2.4 or less. It would seem reasonable to suggest that chances of university graduation on time is far more probable for junior transfer students with a college G.P.A. of C+ or better. On the other hand, in the case of senior transfer students the vast majority (95 per cent) had a G.P.A. of C (2.0) or better.

The mean V.C.C. cumulative G.P.A.'s for those students graduating from university on time was 2.6 for juniors and 2.7 for seniors. The mean G.P.A. for those students not persisting was equally high, that is 2.5 and 2.9 for juniors and seniors respectively. The transfer students who have not graduated on time but to date are still enrolled (excluding extra-

sessional or summer session students) experienced somewhat lower college G.P.A.'s than the groups already mentioned. In this case the persistors who have not graduated as expected experienced a mean G.P.A. at college of 2.1 for juniors and 2.4 for seniors.

U.B.C. Achievement

The mean percentage achievement while at U.B.C. for both juniors and seniors graduating on time was 71 per cent and 69 per cent. Those students not graduating on time but persisting in their studies had somewhat lower average percentage achievement, in this case 60 for juniors and 66 for seniors. In both cases the vast majority of the students had an individual cumulative university average of 50 per cent or over. The nonpersistors, however, as might well be expected, demonstrated a considerably different pattern of university achievement. The mean cumulative university grade was 50 per cent for junior transfer students and 52 per cent for senior transfer students, considerably lower than the graduate and nongraduate persistors.

CHAPTER VI

SUMMARY

The approach in this study was two-fold:

1. an analysis of the subsequent achievement of college transfer students two and three years after transfer; and
2. an accounting of the success of the transfer students in terms of degree attainment.

At the present time there seems to be little definite predictive value in college G.P.A.'s in forecasting the trend of university achievement of college transfer students over a two year period at university. There are, however, certain general characteristics observed that may well be of value in assessing the transfer function of the community college. At first glance the achievement of the transfer students over the two and three year period studied may not appear impressive. Certainly the attrition rate seems somewhat high and the degree attainment of the transfer students would appear overly low. There are two points that, however, must receive serious consideration. The first point is that the numbers considered for this report are somewhat small and represent only the first group of transfer students. The second point is probably the most important. Although the results of the students investigated could not be considered as spectacular, it must be remembered that over two-thirds of the transfer students from V.C.C. to U.B.C. are students that for one reason or another were not eligible to enter U.B.C. directly. In other words, Vancouver City College has enabled students barred from direct admission to university a "second chance". Students whose high school average was marginal, thereby preventing direct

acceptance to university; students who have taken pre-university study outside British Columbia and did not have standards acceptable to B.C. institutions; students who have been away from formal education for some years and lacked the credentials for direct admission to university; these and others have found that with the cooperation of Vancouver City College and the University of British Columbia faculty and staff, that the opportunity of achieving a baccalaureate degree has come within their reach. This then is the success of articulation between the community college and university.

The following are illustrative of the characteristics displayed by the transfer students studied for this report:

1. Two-thirds of the junior transfer students (that is, those students transferring after one year equivalent at college) improved their average at the end of the second year of transfer over the first year. Continuation of improved grades at the end of the third year was experienced by one-quarter of the transfer group still enrolled.
2. Slightly over one-half of the senior transfer students (those students transferring after two years equivalent at college) improved in their average at the conclusion of the second year after transfer.
3. Withdrawal from university accounted for one-third of the nongraduating students. This was the largest single reason for nongraduation. Any conclusions to be drawn regarding the "withdrawal" rate should be tempered with some caution. A sizeable portion of the withdrawing students were from

the Education faculty where a student may accept a teaching position prior to achieving a degree standing. There is already an indication that some of these "withdrawals" are returning to university either at summer sessions or extra-sessional winter sessions.

4. The heaviest withdrawal rate was found amongst the students who transferred at a junior level.

5. Withdrawal <u>during</u> the university session (that is, for those students who enrolled for a term but withdrew prior to the end of the term) was found highest for the senior transfer students (24 per cent of seniors as compared to 7 per cent for the juniors).

6. A partial program status accounted for one-fifth of those students not graduating on time. This situation was twice as prevalent amongst seniors as it was for juniors.

7. The failure of a complete year resulted in 14 per cent of the enrolled students under study not graduating on schedule. The juniors were three times as prone to have this reason for nongraduation on schedule as seniors.

8. A change in major or course direction accounted for six per cent of those delayed in graduation.

9. Twelve per cent of the junior transfer students graduated on time. Forty-seven per cent of the senior transfer students graduated on time. The overall percentage of junior and senior college transfer students graduating on time accounted for 21 per cent of eligible transfer students.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

Vancouver City College is providing an opportunity for citizens of British Columbia to continue their education beyond the high school, an opportunity that for many was not available prior to the opening of community colleges. There are, however, certain observations, especially over a two and three year period, that could well provide the basis for an even more efficient and rewarding articulation process between the colleges and universities.

There is a growing body of evidence to support a view of transfer after two full years of study at a community college as being more satisfactory, academically speaking, than transfer after one year at college. But even this conclusion must be tempered by caution. For example, the seniors (two years at college prior to transfer) had a higher rate of "on-time" graduation, but the actual academic achievement was not quite as high as for the junior transfer student. In other words, although a greater percentage of seniors graduated on time, their overall community college achievement and university achievement was slightly lower than for juniors.

Further observations have led to the conclusion that study as a part-time student or full-time student at college has little bearing on future university graduation patterns. The age grouping of transfer students, at least as studied for this report, seemed to have some bearing on university success. The mature student not only had a higher persistence rate and "on time" graduation rate than college-age students (those under 25 years of age) but the rate of graduation on schedule was considerably higher for mature

students entering the university after two years equivalent at college than for just one year.

It therefore appears that the community college transfer student with the greatest chance of earning his baccalaureate degree on time will be a mature student who has completed his first two years of post-secondary education at the college.

The making of any recommendations of a specific nature based on this study will be postponed until further investigation in this field can be continued on substantial numbers of transfer students. There are, however, most certainly recommendations of a general nature that must be brought forward. For the most part these recommendations are concerned with further detailed study that is urgently required in the general area of transfer of community college students to a university.

From the present study it could be inferred that there is no reason why community college transfer students should require more time and units to complete their degree programs than normally would be expected. Further research in this area is needed. Community college students may be older than the regular university student when they finish their degrees, for any of these suggested reasons: high school deficiencies need to be made up before starting college level courses (the authors question whether there is a need for these so-called "college preparatory" courses - to what degree do high school deficiencies really need to be made up?); the community college student may be hesitant as to the choice of major or program, thereby resulting in some course exploration at the college level; a late decision to attend an institution of higher education; these and other possible reasons for delay in the degree granting function need

further research.

The community college is and should under all circumstances remain a two-year institution, offering in addition to career courses and non-transfer study programs, approximately half of a baccalaureate degree. While the universities have the right to impose restrictions on the amount of credit which can be transferred to their institution, it seems reasonably evident from results of this study, as well as previous studies by the authors, that most college students should be urged to remain at the community college until they can transfer with full college senior status, that is with the first two years of university equivalent completed at college. It is entirely possible that a detailed analysis of the records would in a number of instances reveal specific transfer problems which could be remedied quite easily, thus enabling an even larger number of transfer students to graduate on time as well as avoiding a rather high attrition rate. Considerable time and facilities are urgently needed in order to carry out such detailed investigation.

Factors related to attrition are multiple and complex. Studies are currently underway to discover the "real" reasons for attrition at the college level. But what of the reasons for withdrawal of transfer students <u>after</u> transfer to the university? Much consideration must be given to the reasons for students initially selecting a community college instead of a university. Such reasons might well include financial difficulties, unsatisfactory high school achievement, lack of initial motivation, lack of familiarity with the provincial educational system - therefore, these same factors which led the student to the community college may well lead to their later

withdrawal from the university or account for delay in earning the degree requirements. Further study of the individual transfer student remains to be done. Studies to date have grouped various students into selected categories where the individual's characteristics have been somewhat obscured by the group characteristics.

It has been noted in this report that attrition and graduation rates have varied according to the university faculty entered. It is entirely possible that a sizeable reduction in attrition could be produced by means of a better matching of transfer students and university faculties. In other words more positive steps must be undertaken with the objective of getting a greater number of students into a university faculty where he may have a better opportunity of success.

Now that the first sizeable group of former community college students is about ready to graduate from university, research should be proposed to uncover those areas where both college and university personnel could further assist the transfer student to succeed after transfer.

Present articulation procedures in British Columbia, although evidently satisfactory at this time, will be brought under increasing pressure with the growing volume of transfer students. Numbers will be also complicated by the growing diversity of programs offered in both the community colleges and the universities.

It would therefore seem reasonable to suggest that a high degree of articulation will be required. Differences should continue to exist in the structure and content of courses, methods of instruction and materials. The community college should not be expected to offer an infinite number of

transfer programs to parallel those of the universities within this province. Yet the students' right to reasonable transfer and acceptance of credit cannot be denied without defeating one of the basic reasons for a community college. It is obvious that many problems of effective articulation remain to be overcome; much research on this problem is still required.